ICDB: not just another acronym!

by Bill Darden and Debbie Linton

For the warfighter in the middle of a firefight needing fast, protected, long-range communications, ICDB probably isn't uppermost in his mind. For the company commander deploying his unit into mountainous terrain in a foreign country, ICDB may not be on his deployment checklist. For the battalion operations sergeant planning commo links for a field-training exercise encompassing half of Texas, ICDB might remind him to check out the new yogurt shop in the post exchange.

But ICDB is very important … particularly if the warfighter, company commander or battalion ops sergeant wants to communicate using military satellite communications. ICDB stands for integrated communications database. Every Army unit, Navy ship, Air Force squadron or Marine task force that plans on using military or commercially leased satellites to communicate must have an ICDB number for their milsatcom connectivity requirements to obtain access to milsatcom resources. Military satellite resources are joint resources that must be shared among all services.

What ICDB is

ICDB has been around a long time and may be known by several other names. It began in 1975 as the user-requirements database and was quite basic in the satellite information it contained. In 1983 URDB became a database within the milsatcom user-requirements system. Only the joint staff and satellite-systems managers, however, could access information in MURS; data was difficult to retrieve since processing was done on mainframe computers. By 1989 the movement of MURS operations to personal computers allowed easier access to information.

The database changed names again in 1991 when URDB merged with an Air Force database containing Milstar satellite requirements. This newly merged database was dubbed the integrated satellite database. Satellite-requirements information in ISDB later merged with a database containing terrestrial-communications requirements, and ICDB was born.

ICDB is a consolidated repository of all validated Defense Department milsatcom requirements. It includes information not only on satellite requirements but also on other DoD communications that have been extracted from other databases. There are some 3,000 satellite-communications requirements and 55,000 terrestrial-communications requirements in ICDB. The database is managed by the joint staff and maintained by Defense Information Systems Agency. ICDB is used to document current as well as future requirements.

An outgrowth of ICDB and one of the major sources of future milsatcom requirements is the emerging-requirements database. While ICDB concentrates on near- and mid-term requirements, it's not optimized to support emerging requirements.

Warfighters today are primarily concerned with a short planning horizon (three to five years), are sometimes unaware of planned or possible doctrine changes, and are unable to keep up with rapid technology changes. ERDB consolidates future milsatcom requirements to help planners assess future trends, architectures, networks and acquisition strategies involving milsatcom. Emerging requirements are generated by changes in technology, doctrine or force structure.

Although they aren't required to be validated, anticipated future requirements are submitted in the same manner as ICDB entries and go through the same review process for inclusion into ERDB. ERDB is only an estimate of future requirements and isn't used to justify current operations or prioritize satellite resources for access.

ERDB merged into ICDB in January. This created a single-source database that can provide both current validated requirements and future planning requirements to better plan future architectures.

Validating requirements

Those who wish access to milsatcom resources first must have a validated requirement. Once their requirement is validated and approved by the Joint Chiefs of Staff chairman, a number is assigned to that specific requirement. Obtaining an ICDB number is mandatory to compete for access to milsatcom. It's a necessarily detailed and painstaking process.

Where does a unit begin to get an ICDB number? The first step is to submit specific, complete and detailed information on the requirement to justify the need for milsatcom. Information on a proposed requirement is submitted on DISA Form 772. Information on this form includes types of terminals and their locations in the proposed network, timeframe for use, data rates and classification of traffic; whether communications will be voice, data, fax or video; operations concept; and impact expected on the mission if the requirement isn't approved.

Correctly completing DISA Form 772 is an important first step. To avoid wasting time and effort, take care to ensure these questions are clearly and accurately answered in the initial submission:

- Is my SATCOM requirement valid?
- Does my requirement have a clear operational concept?
- Is my requirement supported by operations plans or operations orders that are clearly identified?
- Does my requirement identify

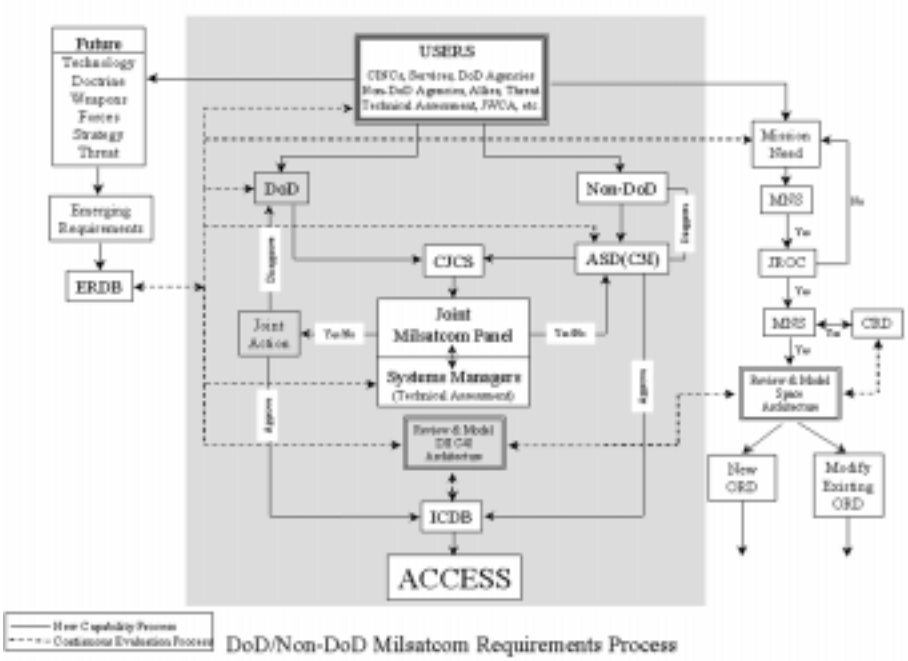

Figure 25. Process of validating requirements for military satellite communications.

the mission supported?

• Do I clearly spell out what will happen and the mission impact if the request is disapproved?

• Is a current point-of-contact listed with accurate contact information?

Once all this information has been entered onto DISA Form 772, the form should be forwarded up the chain of command to the appropriate commander-in-chief whom the requirement supports. Specifically, the J-6 at CINC level is responsible for handling ICDB requests.

J-6 consolidates all ICDB requests within his area of responsibility, internally coordinates them with J-3, validates the requests and then prioritizes them according to MOP-37.

Once this process is complete, requests are forwarded to the joint milsatcom panel administrator by the first working day of the month. Processing time for a routine request is about six weeks after it reaches JMPA.

There will be times when missions call for fast responses and six weeks is too long to wait for approval. Urgent requirements can be submitted directly to the joint staff / J6, with information copies to JMPA. There must be a detailed justification for urgent processing.

The joint milsatcom panel, composed of representatives from each service, meets monthly to review and assess all submitted requirements. User representatives are welcome to attend panel meetings to support requirements JMP is considering for approval.

In assessing requirements, JMP verifies such things as:

• Does the requirement fall under the intended use of milsatcom?

• Can the requirement be satisfied by some other communications means?

• Are all sections of DISA Form 772 completed correctly and clearly?

• Does the operations concept support the priority? Users? Survivability?

• If the requirement doesn't require threshold survivability, could it be satisfied commercially in the future?

• If the requirement is for a trunking system, are individual circuits clearly defined in the applications / systems block?

• Does the technical assessment affect the requirement's validity?

• Is the requirement under the correct command's control?

• Are potential inconsistencies (such as antijam on an ultra-high-frequency system) due to errors in the requirement, or is this an actual statement of need?

JMP can take several actions on a submitted requirement. It can recommend approval of either a new or changed requirement. Or, for those requirements falling outside milsatcom's intended use, the panel would recommend disapproval.

Sometimes, JMP may be unable to make a determination about a requirement's validity. In that case, the requirement would be put in a "hold in abeyance" status until more information can be obtained.

JMP forwards its recommendations to the Joint Chiefs of Staff chairman for final approval. Once approved, requirements are entered directly into ICDB and a number assigned to each approved requirement at the time of its entry. The ICDB number consists of the command name plus a five-digit number (SATCOM requirements use only the last three digits) – for example, CINCEUR 00123.

Whatever action is taken with each requirement, the unit is notified of the final decision.

Maintenance checks

Commands, however, that have successfully gotten their requirements into ICDB aren't done yet! In fact, keeping the requirement in the database is a continual process. MOP-37 directs a complete revalidation of all requirements ICDB contains every two years, specifically in odd-numbered years. The purpose is to make sure all SATCOM requirements are current and accurately stated in ICDB.

It's critical commanders with validated requirements in ICDB conduct periodic "maintenance" checks to ensure their requirements remain in the database. Information may change, POCs or concepts may need to be revised, terminal numbers may need to be modified. Getting approval of a requirement is difficult, but ignoring the require-

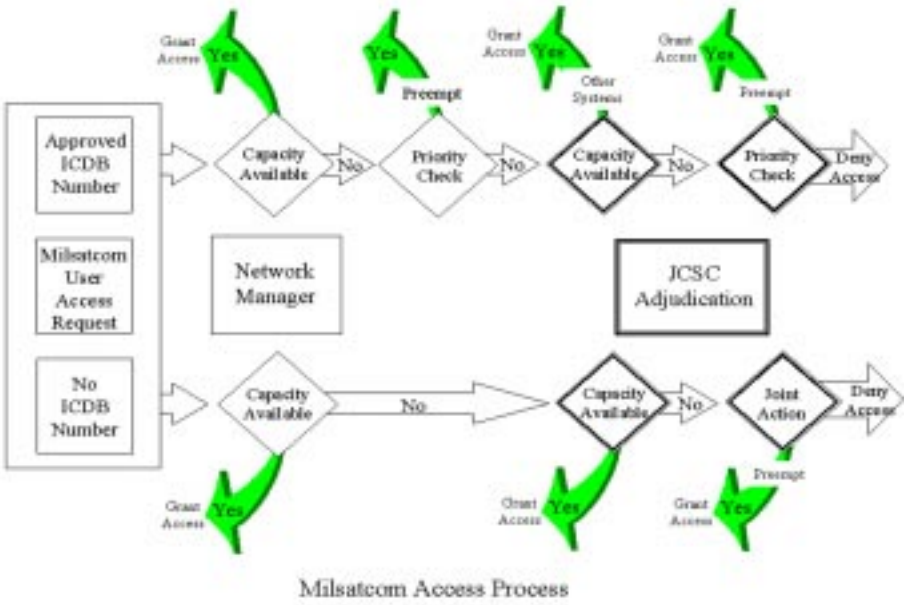

Figure 26. Military satellite communications access process.

ment after its approval is a sure way to lose that hard-earned ICDB number!

An important point to remember is that an ICDB number doesn't guarantee satellite access – it's only the "ticket" that allows the user to compete for access based on availability of resources and priority of need.

Why is ICDB so important? Information it contains is used to help make critical decisions in areas such as terminal acquisitions, loading analyses, program developments, operations-plan support and satellite designs. ICDB is the main tool used to plan the all-important transition from current SATCOM systems to future SATCOM systems being developed and architectures being prepared.

Anyone who "owns" satellite equipment and is responsible for establishing communications via SATCOM should find out if validated requirements for unit SATCOM missions are contained in ICDB and what number is assigned to requirements. It's as easy as sending e-mail; contact Debbie Linton (lintond@emh.gordon.army.mil) with network and command information. Mission success or a valid training experience may depend upon a simple but crucial five-digit number!

Mr. Darden directs Army programs for Information Technology and Applications Corporation in Reston, Va. He retired from the Army in 1994 as a lieutenant colonel working on the Army staff in the deputy chief of staff for operations office, where he was the focal point for Army SATCOM requirements and acquisition. He holds bachelor's and master's degrees in nuclear engineering and has an extensive background in Army satellite communications.

Ms. Linton works for ITAC and the project manager for milsatcom, supporting the Training and Doctrine Command's systems manager for SATCOM at Fort Gordon, Ga. She is a retired Signal Corps major who began her career in Army air-traffic control and completed it as an Army SATCOM command, control, communications and computers architect. She is author of the Army's satellite-communications architecture book.

Acronym Quick-scan

CINC – commander-in-chief
DISA – Defense Information Systems Agency
DoD – Department of Defense
ERDB – emerging-requirements database
ICDB – integrated communications database
ISDB – integrated satellite database
ITAC – Information Technology and Applications Corporation
JMP – joint m(ilitary satellite communications) panel
JMPA – joint m(ilitary satellite communications) panel administrator
Milsatcom – military satellite communications
MURS – m(ilitary satellite communications) user-requirements system
POC – point-of-contact
SATCOM – satellite communications
URDB – user-requirements database

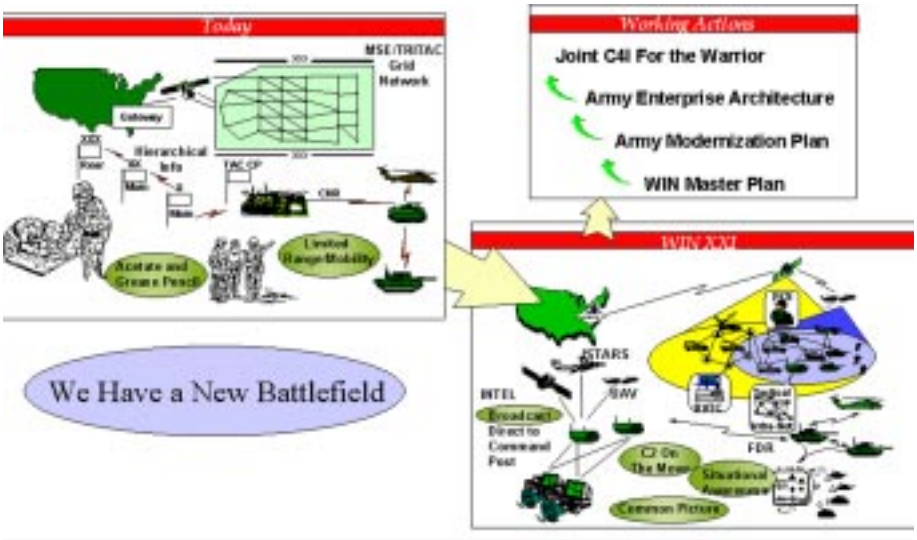

Figure 27. Satellite communications have created a new battlefield.